

IN THE CLAIMS:

Please amend the claims as follows:

1. (Canceled)

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Currently Amended) Bi-directional sliding pendulum seismic isolation systems for reducing seismic force acting on a structure by sliding pendulum movements, each system comprising:

a lower sliding plate forming a sliding path in a first direction;

an upper sliding plate forming a sliding path in a second direction;

a sliding assembly for reducing the seismic force of the structure by performing a pendulum motion by sliding along the lower and upper sliding plates;

wherein the lower and the upper sliding plates have sliding channels for sliding of the sliding assembly respectively;

wherein the sliding assembly comprises a main body; lower sliders provided at a lower portion of the main body, the lower sliders sliding along lower sliding channels of the lower sliding plate; and upper sliders provided at an upper portion of the main body, the upper sliders sliding along upper sliding channels of the upper sliding plate;

wherein the lower and upper sliders include a slider support, and a slider core mounted at an end of the slider support to freely rotate with respect to the slider support, the slider core being in frictional contact with the sliding channels in such a manner that the area contacted with the sliding channels is maintained even though the sliding assembly is located in a random position of the sliding channels;

wherein the slider core has an upper surface of a shape corresponding to radius of curvature of the sliding channels and a lower surface of a semicircular plate type having a predetermined thickness and radius of curvature, and rotates with respect to the slider support when the lower surface is mounted in the slider support;

~~The systems as claimed in claim 21~~, wherein the sliding assembly has a ratio of a predetermined width/height not to be overturned when the sliding assembly performs the pendulum motion, and

wherein radius of curvature of an arc section of the upper sliding channel has a value smaller than radius of curvature of the first directional pendulum motion to prevent the upper slider from escaping from the upper sliding channel while the sliding assembly performs the pendulum motion in the lower sliding channel, and radius of curvature of an arc section of the lower sliding channel has a value smaller than radius of curvature of the second directional pendulum motion to prevent the lower slider from escaping from the lower sliding channel while the sliding assembly performs the pendulum motion in the upper sliding channel.

23. (Currently Amended) Bi-directional sliding pendulum seismic isolation systems for reducing seismic force acting on a structure by sliding pendulum movements, each system comprising:

a lower sliding plate forming a sliding path in a first direction;

an upper sliding plate forming a sliding path in a second direction;

a sliding assembly for reducing the seismic force of the structure by performing a pendulum motion by sliding along the lower and upper sliding plates;

wherein the lower and the upper sliding plates have sliding channels for sliding of the sliding assembly respectively;

wherein the sliding assembly comprises a main body; lower sliders provided at a lower portion of the main body, the lower sliders sliding along lower sliding channels of the lower sliding

plate; and upper sliders provided at an upper portion of the main body, the upper sliders sliding along upper sliding channels of the upper sliding plate;

wherein the lower and upper sliders include a slider support, and a slider core mounted at an end of the slider support to freely rotate with respect to the slider support, the slider core being in frictional contact with the sliding channels in such a manner that the area contacted with the sliding channels is maintained even though the sliding assembly is located in a random position of the sliding channels;

wherein the slider core has an upper surface of a shape corresponding to radius of curvature of the sliding channels and a lower surface of a semicircular plate type having a predetermined thickness and radius of curvature, and rotates with respect to the slider support when the lower surface is mounted in the slider support; and

~~The systems as claimed in claim 21,~~ wherein an escape prevention sill is provided between the sliding channels to prevent the sliders of the sliding assembly from escaping from the sliding channels.